

Activities Report BOTA-SAP 2006

Species delimitation and phylogenetic position of the American bamboo *Otatea* (Poaceae: Bambusoideae)

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Work plant proposed to BOTA-SAP

Activity 1: Collection of bamboos in Chiapas. In table 1 are there is a list of the taxa we plan to collect. Collections will consist of live, silica and herbarium specimens. One of the main goals is to find a new population from *Otatea glauca* in Chiapas.

Activity 2: Collection of bamboos in Oaxaca (table 1). Collections will consist of live, silica and herbarium specimens.

Results from the proposed activities

Activity 1, it was possible to collect of all species, however it was not possible to collect *Aulonemia clarkiae* y *Aulonemia laxa*. The first is only known from the type locality from Mexico, where we tried to find it, but it was not possible. We tried to find the second species in several localities without success.

Activity 2, It was not possible to collect in Oaxaca because security issues. However we will make the field work later in the year.

We did two field trips to Chiapas, the first in September and the second in November in 2006. The second field trip was two collect *Aulonemia clarkiae* y *Aulonemia laxa* but we did not find plants. However we found new populations of *Otatea*.

Table 1 lists the collected species, with locality, and indicating if the material included live plants or herbarium specimens. We did not collect some plants of *Chusquea*, because it was a long trip. In the locality of *Otatea glauca* we only collected silica and herbarium specimens because the population consisted only of four individuals. Plants of *Guadua paniculata* and *Otatea acuminata* did not survive the transplant.

All live specimens are part now of the Mexican Collection of Bamboos in the Jardín Botánico Francisco Javier Clavijero del Instituto de Ecología A. C., and the herbarium samples were deposited in XAL herbarium from the same Institution.

Table 1. Species collected in Chiapas.

Specie	Locality	Live material collected	Live material already in the collection	Herbarium specimens
<i>Olmeca reflexa</i>	Ocozocuatla	X	√	√
<i>Chusquea sp.</i>	Zinacantán	√	√	√
<i>Guadua paniculata</i>	Motozintla	√	*	√
<i>Chusquea sp.</i>	Motozintla	X		√
<i>Otatea glauca</i>	Motozintla	X	√	√
<i>Otatea acuminata</i>	Tonalá	√	*	√
<i>Chusquea sp.</i>	Tonalá	X		√
<i>Chusquea sp.</i>	Tonalá	X	√	√
<i>Otatea acuminata</i>	Tluxtla Gutiérrez	√	*	√
<i>Chusquea repens</i>	Tenejapa	√	*	√
<i>Otatea fimbriata</i>	Tuxtla Gutiérrez	√	√	√
<i>Rhipidocladum pittieri</i>	Tuxtla Gutiérrez	√	√	√
<i>Otatea fimbriata</i>	Villa Flores	√	√	√
<i>Rhipidocladum pittieri</i>	Villa Flores	√	√	√

√ =live and herbarium specimens ; X = snot collected; * = living samples that die.

Budget report

For the two field trips a vehicle from Instituto de Ecología A. C. was used with support from Dr. Victoria Sosa and Dr. Teresa Mejía.

The total cost of the two field trips was \$ 6,567.00 Mexican pesos (table 2). The amount of money from BOTA was \$10,138.50 Mexican pesos (\$940.00 US dollars), \$60.00 US dollars from deposit charges. We have a \$ 3,571.5 Mexican pesos remaining (table 3). With this sum we will do field work in Oaxaca or the central states from Mexico, where there are a several populations from *Otatea*.

Table 2. Budget in detail

Budget	With bills	Without bills	Total
Transportation	\$ 438.00	\$ 0	\$ 438.00
Gas	\$1,861.00	\$ 0	\$ 1,861.00
Meal	\$ 818.00	\$ 500.00	\$ 1,318.00
Lodging	\$2,950.00	\$ 0	\$ 2,950.00
		Total	\$ 6,567.00

Table 3. Budget summary

BOTA-SAP 2006	\$ 10,138.50 Mexican pesos
Money expend	\$ 6,567.00
Remaining	\$ 3,571.50

Final Suggestions

Even though it was not possible to find specimens of *Aulonemia clarkiae* and *Aulonemia laxa*, however Gilberto Cortés kindly gave us samples from the two species. In the type locality of *Otatea glauca* I only found four young plants and one of them had flowers. This population is in risk to extinction, due the human impact that is destroying the dry forest and oak forest for coffee and mango plantations. Moreover, the Stan hurricane modified the dry forest just near to these populations.

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